ceegex

CENTRAL EASTERN EUROPEAN
GAS EXCHANGE

Global & Regional Market Analysis

NATURAL GAS, April 2023

17/05/2023

STORIES OF THE MONTH

APRIL 2023

- The EU's **first joint gas buying tender was planned to take place on 25 April through the AggregatEU** platform.
- Registration was open until 20 April.
- The aggregated demand is matched with sellers in the tender process. Further negotiations and concluding contracts would happen outside the tender.

- The **Iberian price cap** on gas for power generation will be **extended to 31 December instead of 31 May**. It will be increased each month from 55 EUR/MWh to 65 EUR/MWh.

- Six of the remaining eleven **production wells at the Groningen gas field were closed** from 1 April.
- **Germany closed down its three remaining nuclear reactors** on 15 April, in total 18 GW since 2011. The closures might increase demand for gas or volatility during the summer period.

- ENTSOG published its **Summer Supply Outlook for 2023.**
- According to the report the EU can fill gas storage facilities to at least 90% by October, even without Russian pipeline gas.
- In such case the EU stock levels could fall to 11% by the end of March 2024 in a normal winter, and 2% in a cold winter.

- **Hungary and Russia reached new gas, oil and nuclear agreements**.
- Gazprom would maintain an option to supply **additional gas to Hungary this year** on top of the shipments agreed under a long-term deal via the Turkstream pipeline. The price of the gas would be **maximum 150 EUR/MWh.**

- **Serbia extended the booking agreement for 500 mcm of gas storage capacity** in Hungary until 31 March 2024.
- **Croatia plans expanding gas interconnectors with Slovenia and Hungary**. The extension to the HU-HR interconnection point should be completed by the end of 2025.
- Azerbaijan, Bulgaria Hungary, Romania and Slovakia on 25 April signed a memorandum of understanding on natural gas deliveries to CEE via the **Solidarity Ring**. It is a route to deliver 5-9 bcm gas from Turkey via Bulgaria, Romania and Hungary to Slovakia.

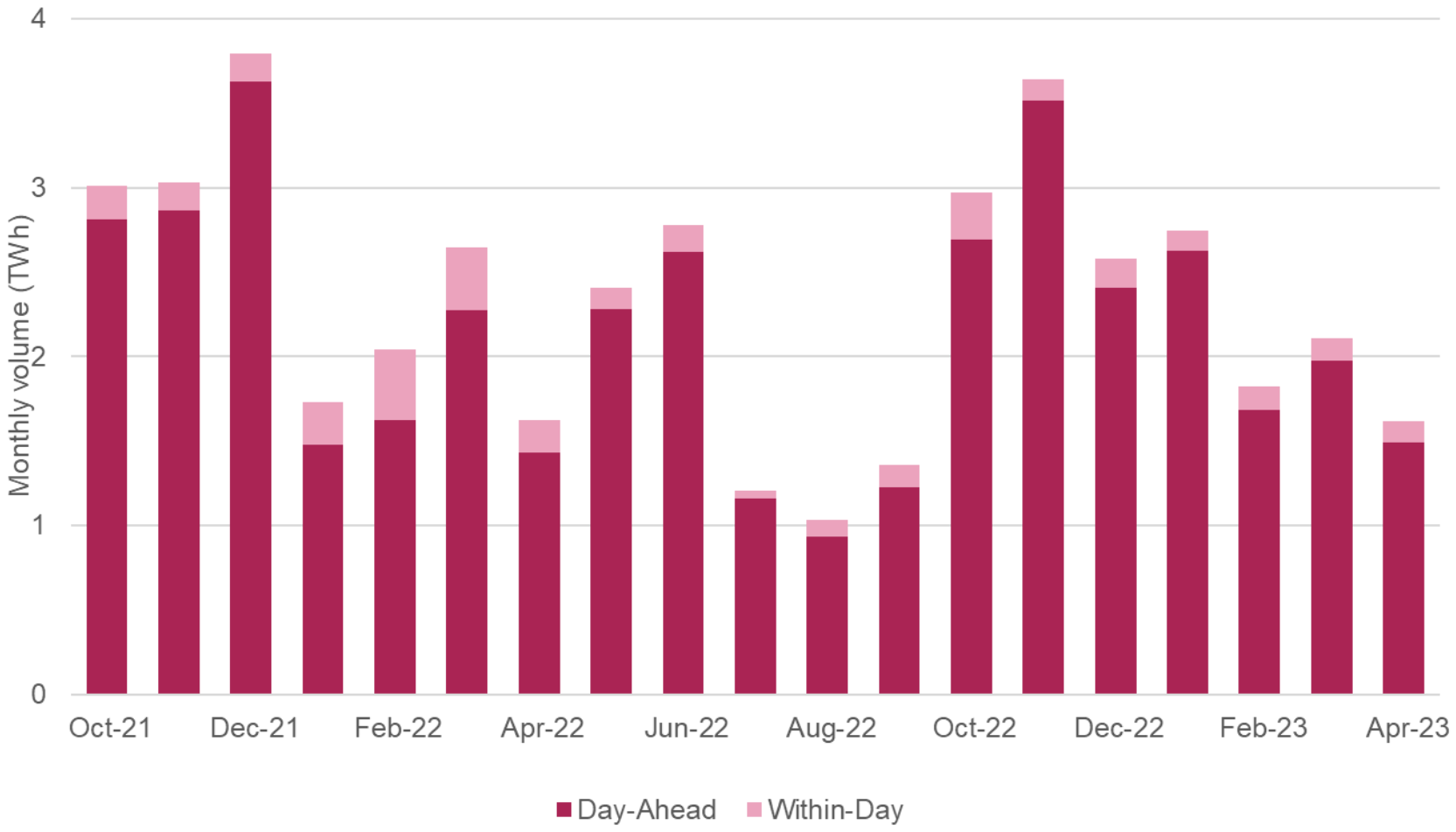
- From 1 April FGSZ announced the implementation of the **Firm DA Use-It-Or-Lose-It mechanism** to transit bookings in either direction at the **Hungary-Croatia and Hungary-Slovakia** border points.

Sources: Argus, Bloomberg, ICIS, IEA, Euractiv, Financial Times, G7, Montel, NRGreport, Portfolio, Platts, Reuters

TRADED VOLUMES

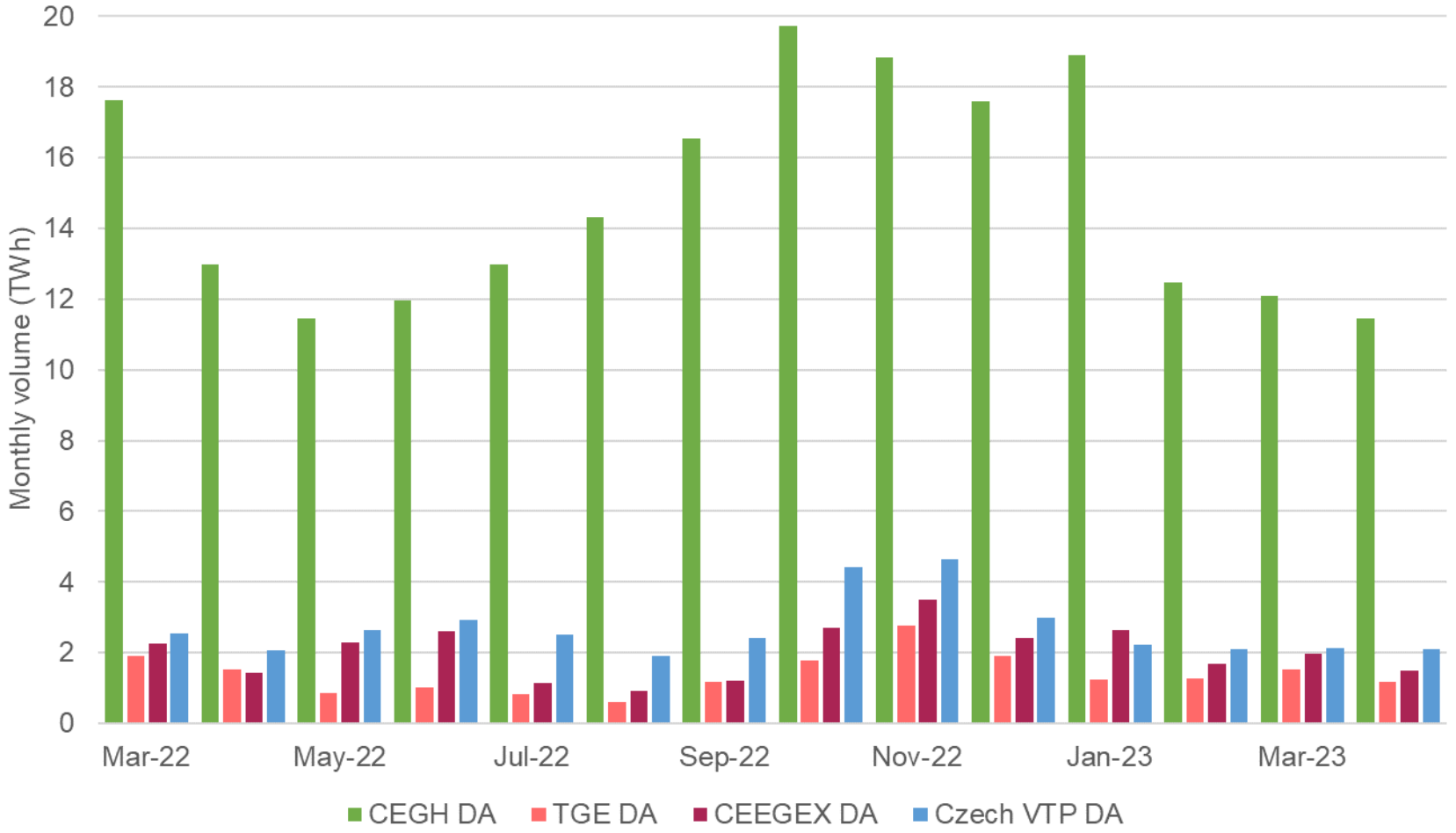
EXPERT OPINION:

- In April CEEGEX **DA traded volumes decreased** YoY, and also decreased in MoM.
- **WD volumes proved to be stable**, thus the change in traded volumes was caused mostly by DA volumes.
- **Domestic demand lowered and storage injections started** already before 1 April.
- Most probably **demand destruction would remain prolonged with the end of the heating season**. Furthermore, both residential and domestic consumers **who had replaced gas for a more cost-effective alternative** during last winter **might not return back to gas** usage in the future.
- Gas demand for power generation might ramp up during the summer period due to low water levels and low nuclear availability.



Sources: CEEGEX

REGIONAL SCOPE DA MARKETS



EXPERT OPINION:

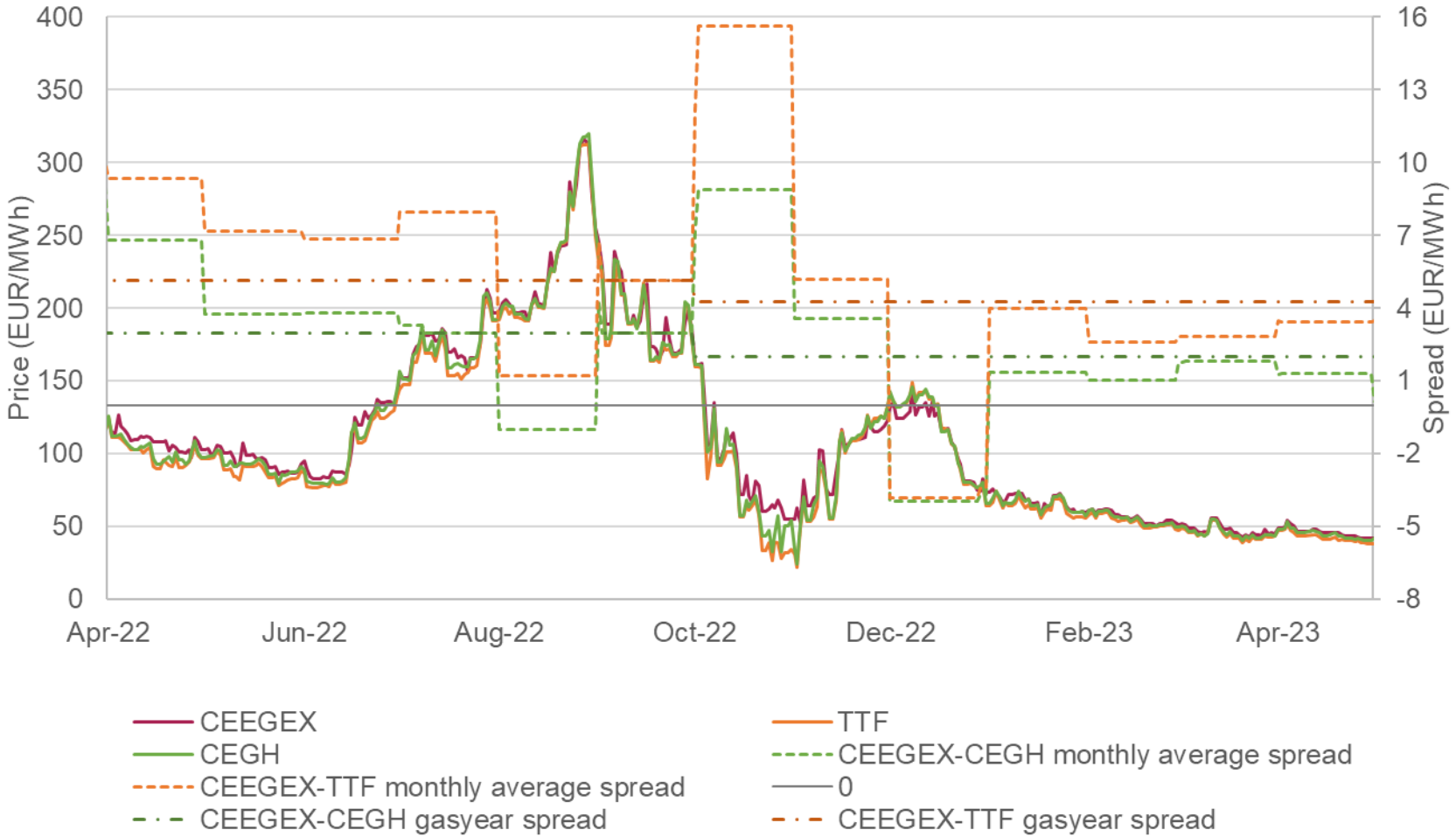
- In April volumes **remained below both MoM and YoY volumes** also on regional exchanges, except at Czech VTP.
- Traded **volumes are decreasing Europewide despite a bearish prices**.

Sources: CEEGEX, Refinitiv

REGIONAL PRICES AND SPREADS

EXPERT OPINION:

- The CX-CEGH and CX-TTF **spreads continued to be narrow** in comparison to 2022 values.
- The **CX-CEGH spread remained positive in April**, resulting in the **profitability of gas imports from AT** to HU.

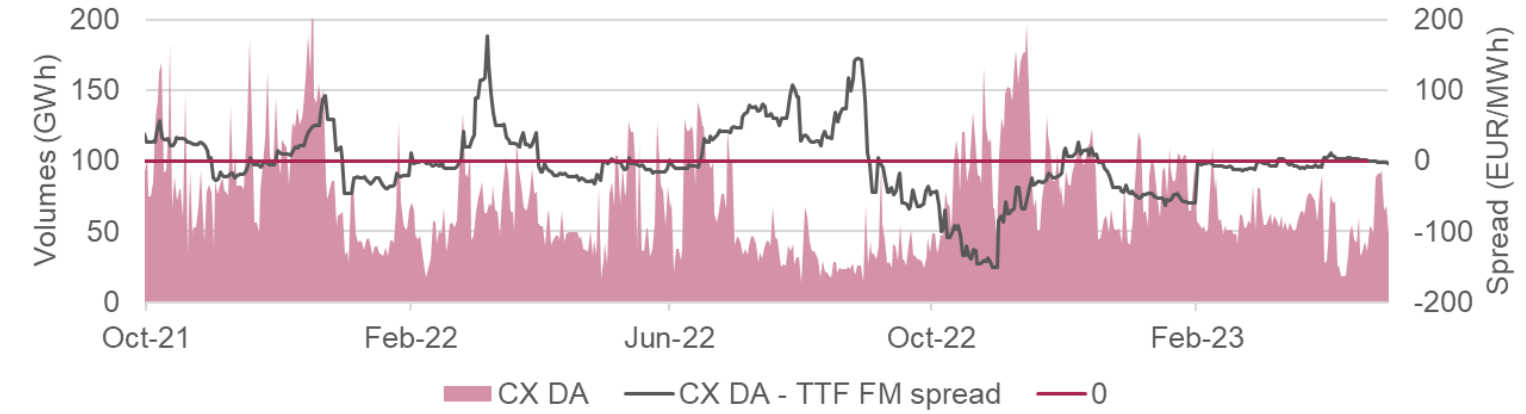


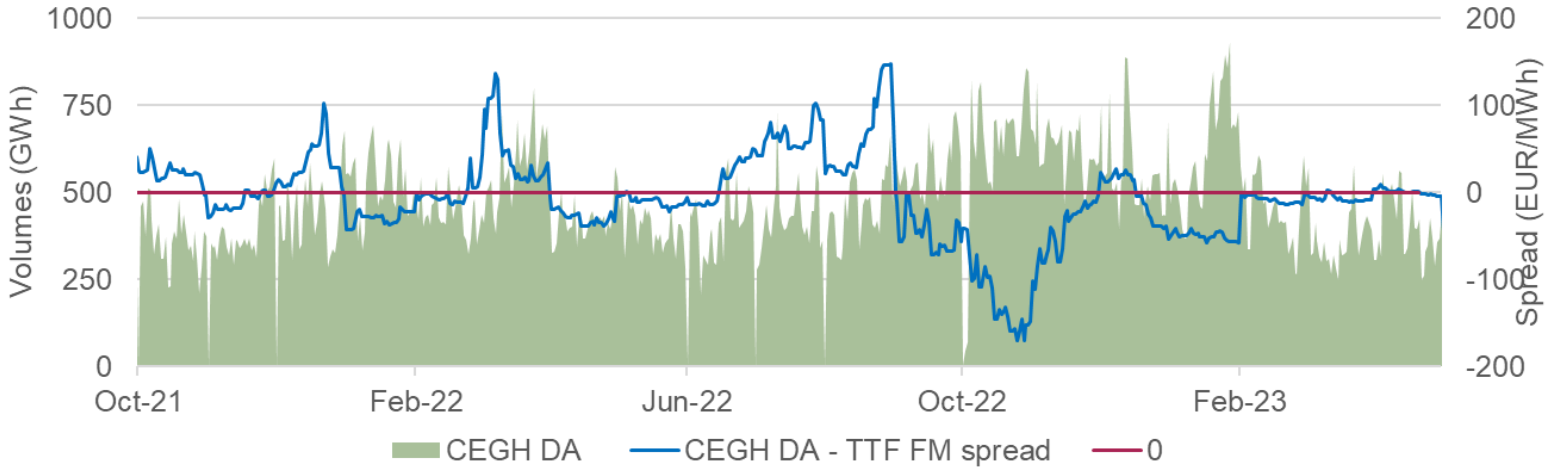
Sources: CEEGEX, EEX

TTF FM-SPOT SPREADS

EXPERT OPINION:

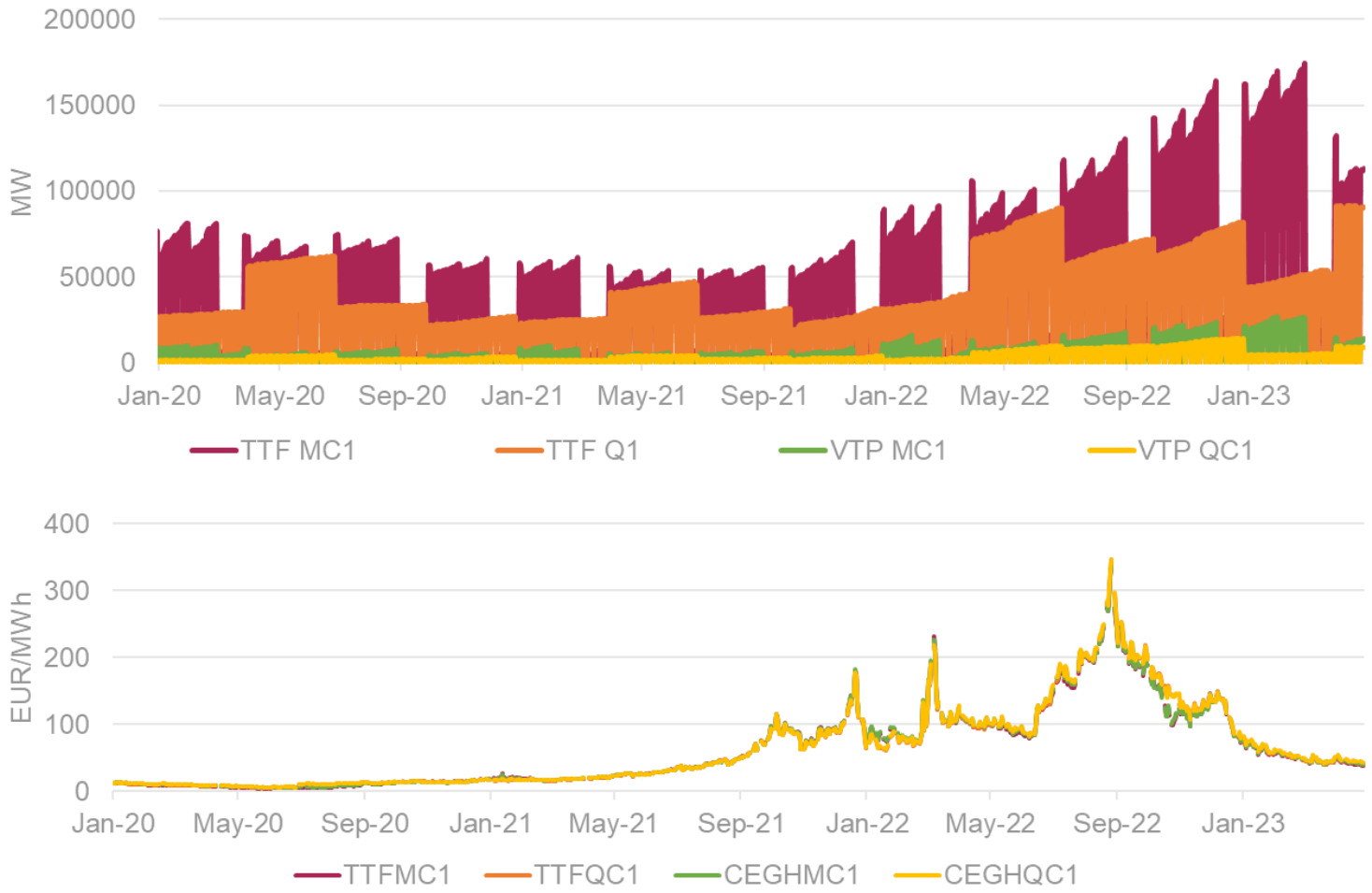
- Since February the **TTF FM-spot spread remained close to 0**, which means there was no real incentive to trade spot volumes.
- In April on both exchanges the **DA volumens decreased** compared to the previous year.





Sources: CEEGEX, EEX

TTF – CEGH OPEN INTERESTS



EXPERT OPINION:

- Open interest is the **total number of futures contracts held by market participants at the end of the trading day**. It is used as an indicator to determine market sentiment and the strength behind price trends.
- With the high volatility and high prices, **the open interest value increased.**
- We can see that QC1 is spiking in every year when it is traded for Q3, which is the end of the injection period for the gas storage sites.

Sources: Refinitiv, CME

JAPANESE CANDLES

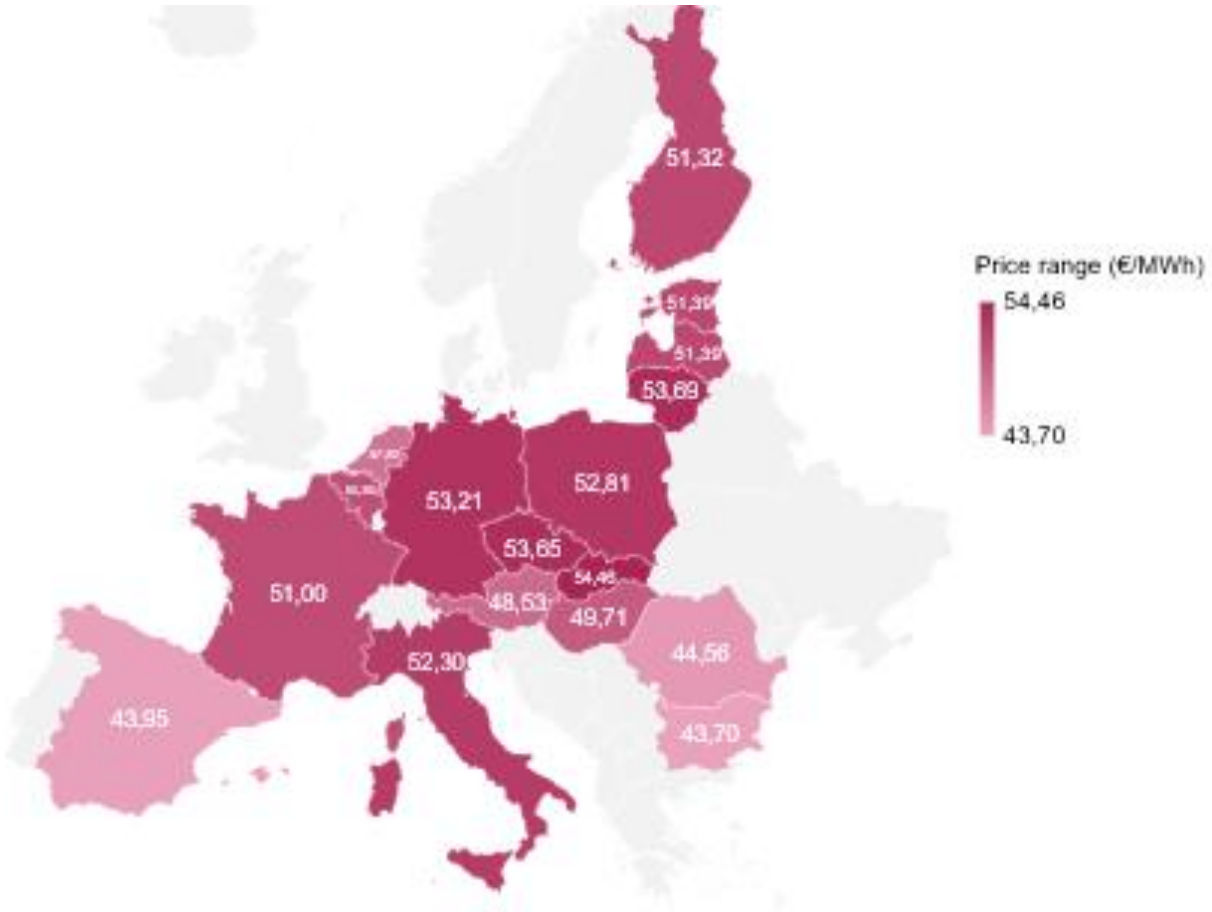
EXPERT OPINION:

- In April **volatility remained moderated** in comparison to 2022.
- Since January prices have been pressured by mild weather, low demand & high LNG inflow.
- No significant news relating to pipeline supply drops or regulatory changes also kept markets calm.
- **At the start of April colder weather and the continuation of LNG terminal strikes slightly bolstered prices**.

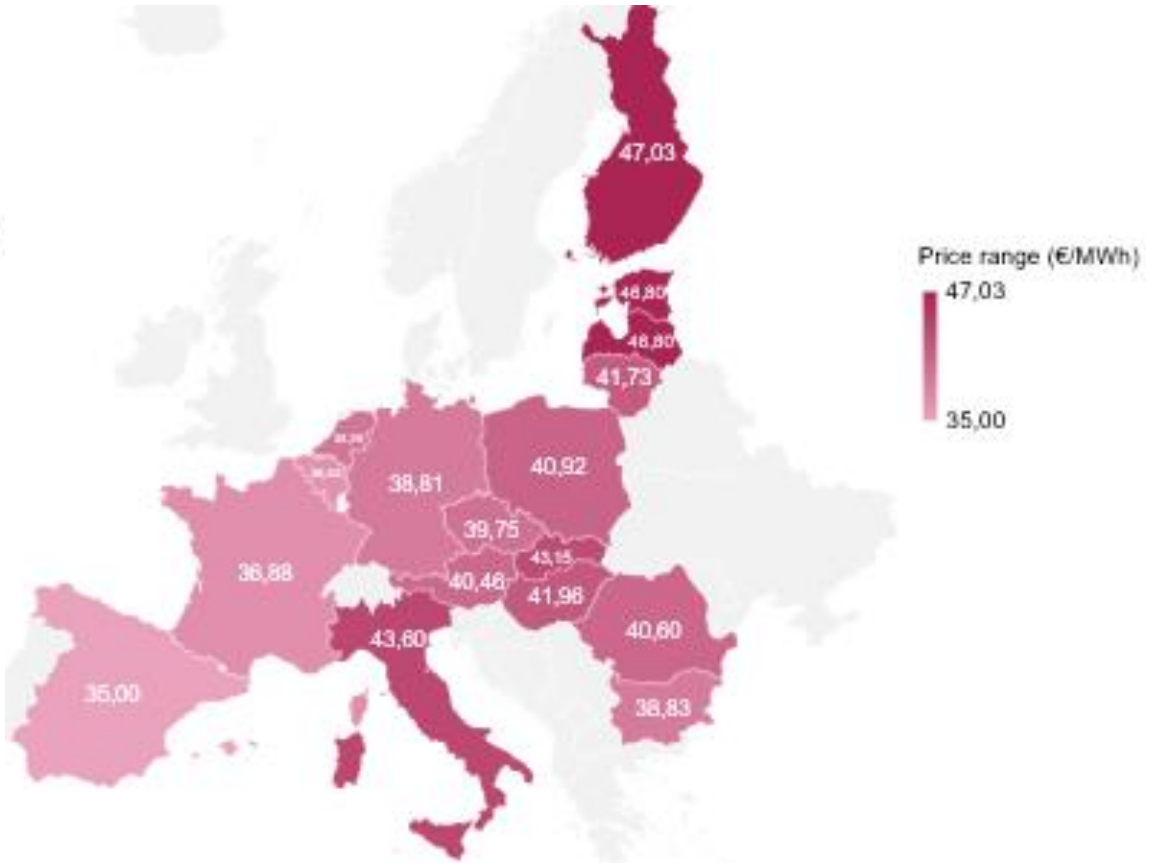
Sources: CEEGEX, ICIS, Refinitiv

NATURAL GAS PRICES SNAPSHOT

03/04/2023



28/04/2023

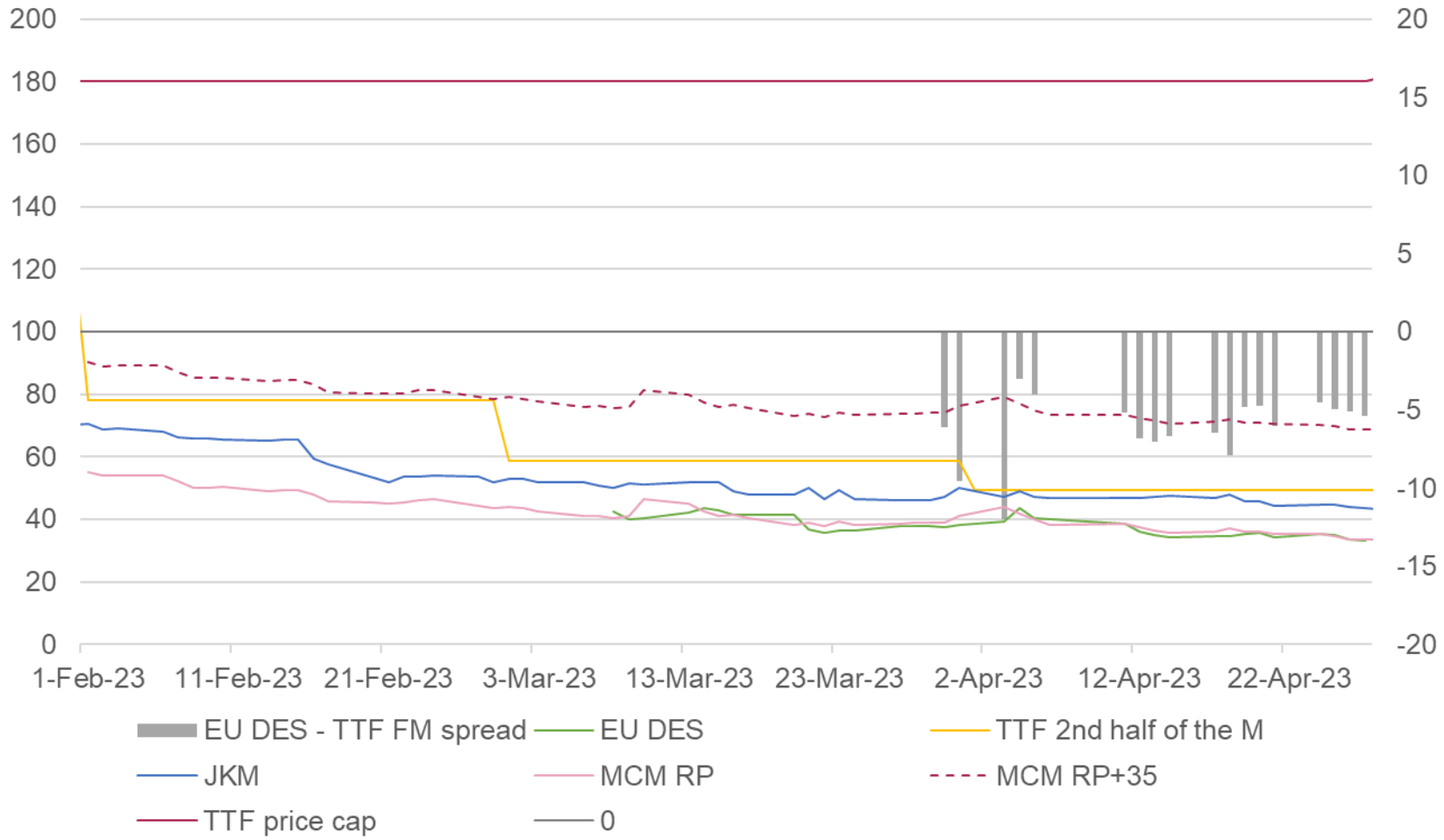


Sources: CEEGEX, ICIS, Refinitiv

LNG BENCHMARKS VS MCM

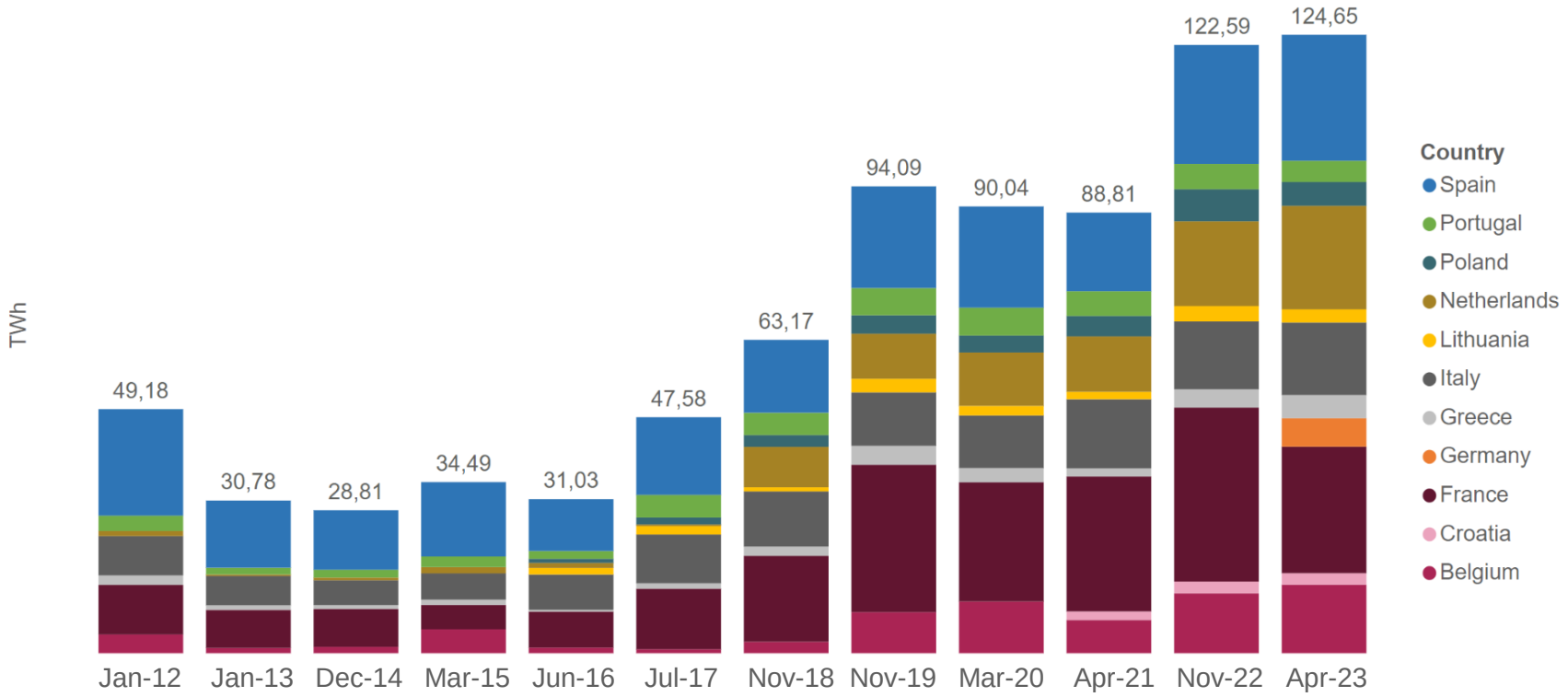
EXPERT OPINION:

- ACER started publishing a set of new benchmarks in 2023:
  - **EU DES** = LNG price benchmark for EU (NWE & SE) based on data reported by market participants
  - **MCM RP** = benchmark price based on EU DES, JKM, HH. This is the first basis of the „price cap" activation.
  - **EU DES – TTF FM spread =** This is the second basis of the „price cap" activation.
- The **dynamic bidding limit** is set at MCM RP + 35 EUR/MWh.
- The **price cap is activated** if the TTF FM price is avobe 180 EUR/MWh & the MCM RP – TTF FM spread is above 35 EUR/MWh.
- In present analysis TTF daily prices for the FM product are averaged according to the **methodology of calculating JKM** with the purpose of a more precise comparison.



Sources: CEEGEX, EEX

RECORD LNG SEND-OUTS BY EUROPEAN COUNTRIES*



EXPERT OPINION:

- Present chart shows **which months have seen the highest LNG deliveries in Europe** since 2012.
- Over the past 12 years, LNG demand has grown tremendously year on year, with some new countries joining the data and building LNG storage facilities, such as Croatia, Germany, Lithuania and Poland.
- **The records for 2022 and 2023 are 3-4 times higher even than in the early 2010s.**
- This trend is likely to continue because the main goal of European countries is to become independent from Russian gas, which means that many countries are now trying to meet their demand from LNG tankers, such as Finland, where a new FSRU has been built.

- Excluding UK, Finland (data not available)

Source: Alsi, Reuters

RECENT INFRASTUCTURE DEVELOPMENTS

1 **GIPL**

2 **Baltic pipe**

3 **GIPS**

4 **IGB**

5 **Eemshaven FSRU LNG terminal**

6 **Csanádpalota** capacity increase

7 **Hungary's** 3rd LNG filling station

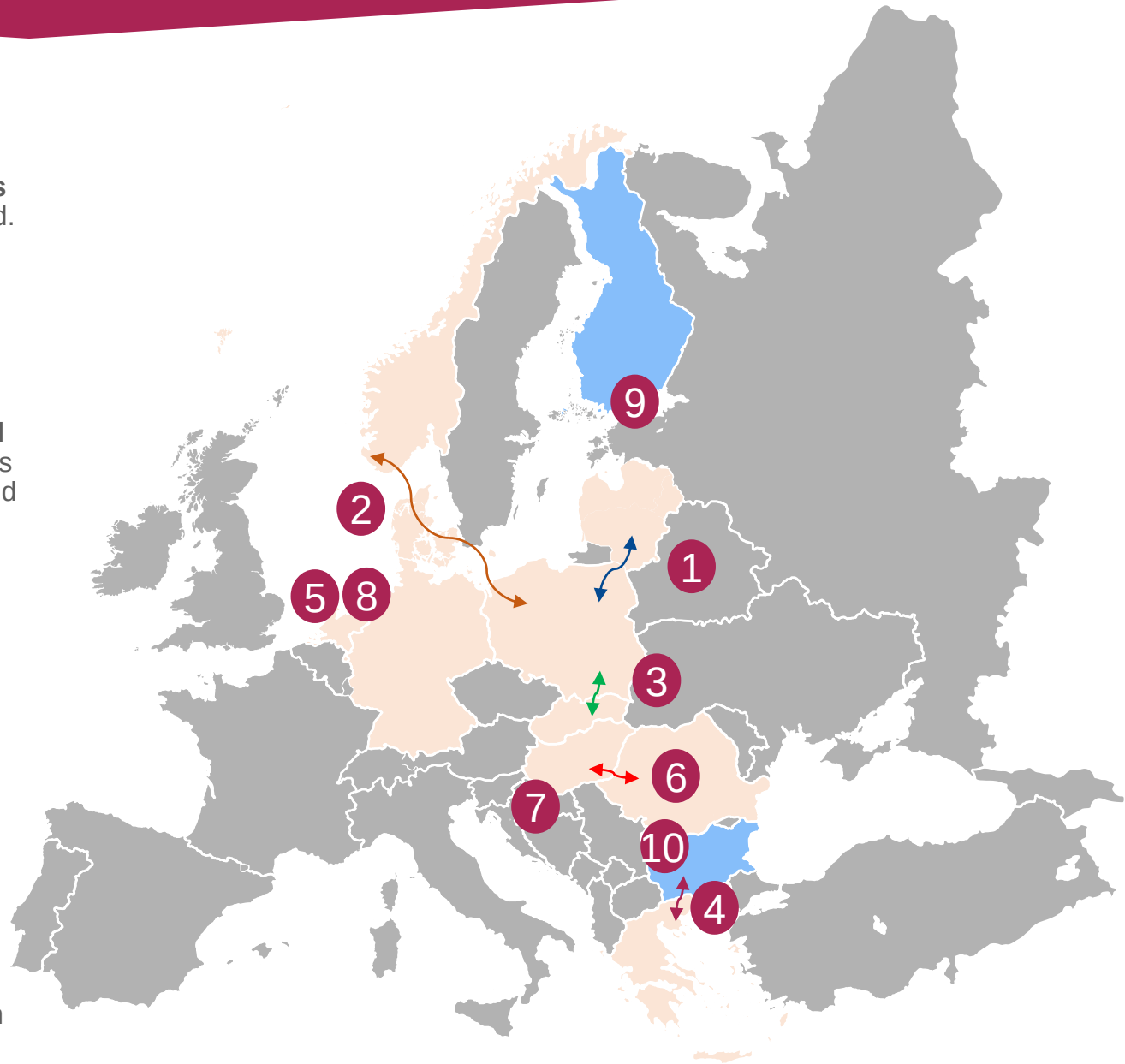
8 **Wilhelmshaven FSRU LNG terminal**

9 **Finland's first FSRU anchors in Inkoo**

- It will **serve Finland and other Baltic states** under a 10-year charter **deal Gasgrid** signed.
- **Gasgrid has leased the 291 meters long and 43 meters wide Exemplar** for a total cost of 460 million euros.
- The vessel can provide more than 5 bcm/y.
- **Elenger has signed agreements for a total of ten cargoes by fall 2023.** Three deliveries arrived in Klaipeda in January and March, and a total of seven deliveries will arrive at the new Inkoo FSRU terminal in the spring and summer.

10 **Chiren Terminal**

- Works on the storage facility expansion are envisaged to be completed by the end of 2024.
- The **project aims to increase the active gas volume up to 1 bcm** from the current 550 mcm, increase **the daily withdrawal capacity up to 10 mcm/day and the injection capacity up to 8 mcm/day.**
- Currently, the maximum daily withdrawal capacity is 3.82 mcm/day, and the maximum daily injection capacity is 3.62 mcm/day.

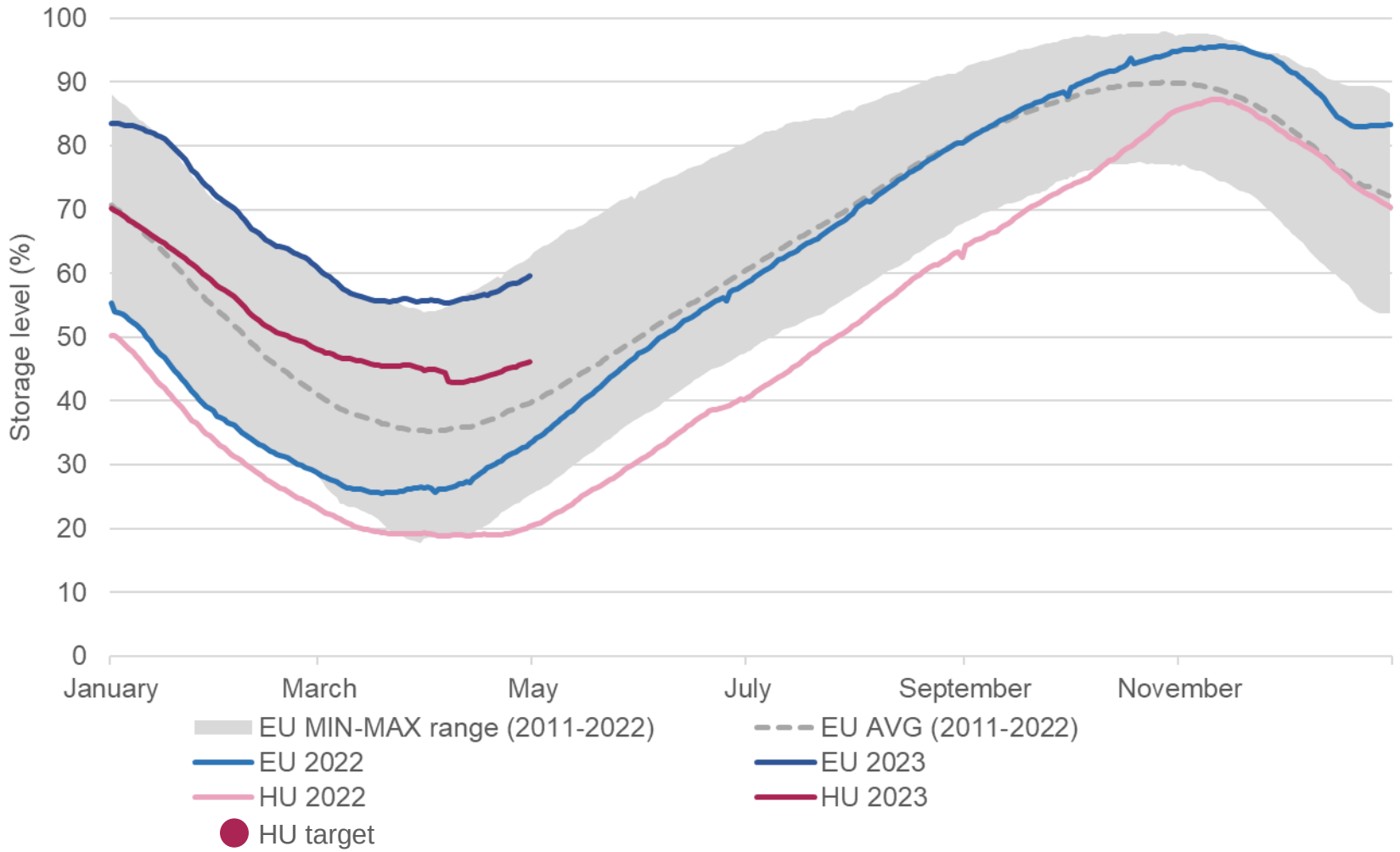


Sources: CEENERGYNEWS, LNGPrime

GAS STORAGE LEVEL IN EU AND HU

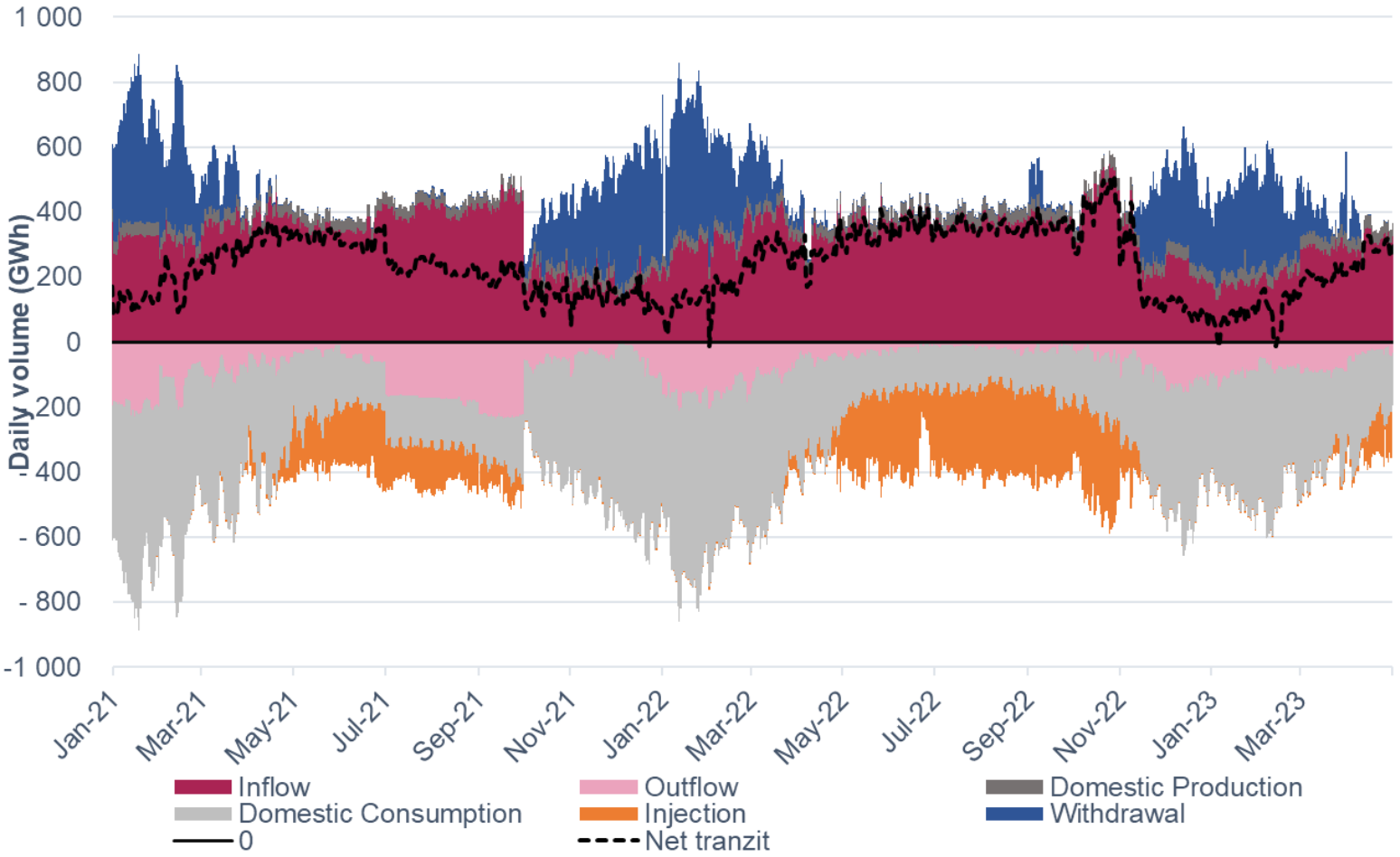
EXPERT OPINION:

- European **injections started already before 1 April and continued at a lower pace** than one year ago.
- Aggregated EU storage levels went under the maximum values of 2011-2022.
- EU storages were at 60% by the end of the month.
- Hungary was on 46% at the end of April, which is almost 10% higher than the May 1 target level.
- **HU intermediate targets:**
  1. Feb 1: 51%
  2. May 1: 37%
  3. Jul 1: 65%
  4. Sept 1: 86%
- **EU final target by Nov: 90%**



Sources: CEEGEX, FGSZ, AGSI, EUR-Lex

HUNGARIAN GAS MARKET BALANCE



EXPERT OPINION:

- The **gas consumption decraesed in April** as spring arrived together with warmer weather.
- Storage withdrawals dropped in April and **injections started already by the end of March.**
- On overall imports increased in comparison to February-March with the **return of flows from AT & RS>HU imports jumped from 12 April.**
- HR and RO imports also ramped up.
- Exports to UA remained high since February, while former exports to SK disappeared.

Sources: ENTSO-G, FGSZ

USE IT OR LOSE IT MECHANISM

» **CMP:**

- Congestion management procedures aim to ease contractual bottlenecks, which occurs when interconnector capacity is fully booked by network users, but part of it remains unused while other network users need it.

» **UIOLI:**

- Short term: The DA UIOLI is a restriction on the re-nomination of non-interruptible capacity. Non-interruptible capacities may be modified upon renomination by up to 50% of the originally non-nominated capacities. The remaining capacity can only be renominated as interruptible capacity.
- Long term: Activated, when the network user has used or offered to the market on average less than 80% of its non-interruptible firm capacity in the last 30 days. In such a case, the network user will be deprived of its capacity, which means limiting its right to use capacity for a certain period or for the entire remaining term of the capacity contract.

» **ACER regulations:**

- During their conference in March, ACER noticed market participants and trading system operators about the introduction of monthly UIOLI mechanism.
- Instead of the monthly UIOLI, and regardless of whether those interconnection points are congested or not, national regulatory authorities may decide to introduce one of the following mechanisms at all interconnection points:
  - a firm day ahead use-it-or lose-it mechanism
  - an oversubscription and buy-back scheme offering at least 5% additional capacity in relation to the technical capacity at the relevant interconnection point
  - offering initially not nominated capacity on a day-ahead and within-day basis, to be allocated as interruptible capacity

» **TSO announcements:**

- Slovakia: Eustream's decision is to offer additional interruptible capacity.
- Croatia: Plinacro implements a firm day ahead use-it-or-lose-it mechanism.
- Austria: E-Control (government regulator) already introduced the DA UIOLI in 2020 and it continues to apply.
- Hungary: FGSZ applies a firm day ahead use-it-or lose-it mechanism for the HU>SK, SK>HU, HU>CRO, CRO>HU interconnection points.

Sources: REKK, ACER, ENTSOG, Eustream, Plinacro, E-Control, FGSZ

CORPORATE CARBON FOOTPRINT (CCF) & GHG PROTOCOL

Carbon Footprint

- A carbon footprint measures the **amount of carbon dioxide and other greenhouse gasses (GHG) produced by an organization or event**.
- A carbon footprint is typically measured in units of carbon dioxide equivalent (CO2e), the most common greenhouse gas.

Corporate Carbon Footprint (CCF)

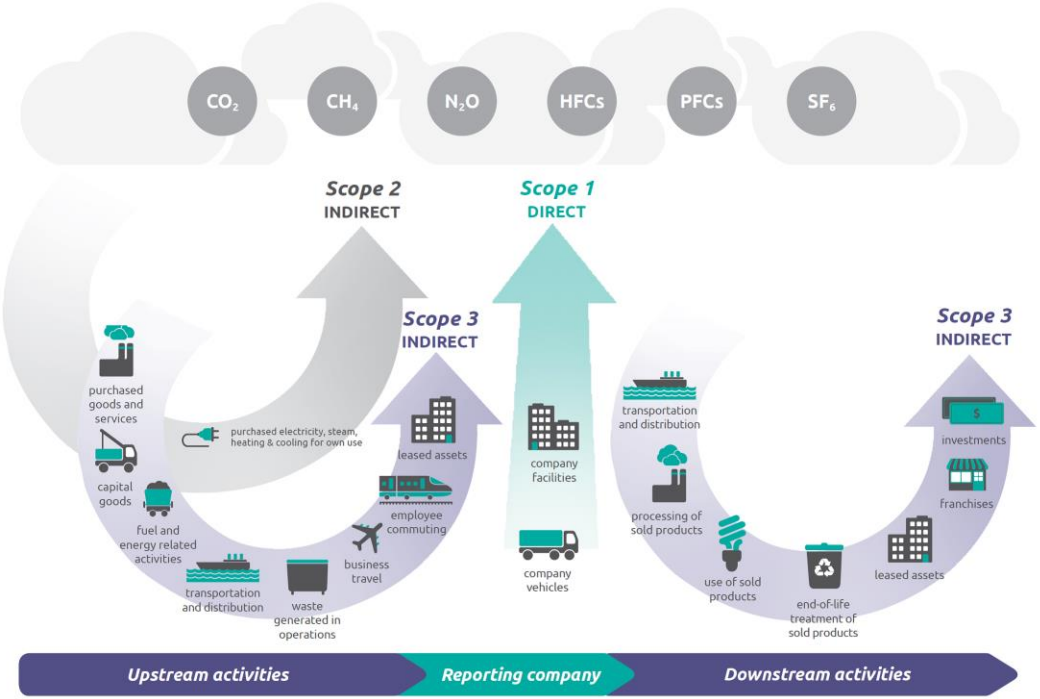
- Carbon footprints result from **companies, organizations consuming energy in their operations, value chains and producing waste**, all of which can result in GHG emissions.
- For example, an office building has a carbon footprint from using electricity for lighting, heating, and cooling. It generates waste in a landfill, producing methane.

GHG Protocol

- The GHG protocol is a **global corporate standard for carbon footprint measurement and reporting.** It standardizes the measurement, management, and reporting of Greenhouse gas (GHG) emissions generated by a company.
- GHG protocol was created jointly by the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD).
- The GHG protocol **categorizes emissions related to company operations into three scopes (areas)** and has become a widely used international standard: **Scope 1, Scope 2, Scope 3.**
- Survey on Need for GHG Protocol Corporate Standards and Guidance Updates (Nov 2022-March 2023) -> Publication of revised Guidance ~2025

Scope 2 & GOs

- **GHG Protocol Scope 2 Guidance (2015):** framework for evaluating and reporting the carbon emissions of purchased electricity and heat.
- The framework considers Energy Attribute Certificates (EACs) such as **Guarantees of Origin (GOs),** RECs, and I-RECs as part of a best-practice system for **documenting and tracking electricity consumed from renewable sources.**
- Scope 2 refers to the **emissions produced at the point of energy generation**.
- **Dual reporting**: location based, market based



Sources: GHG, EPA, PWC